

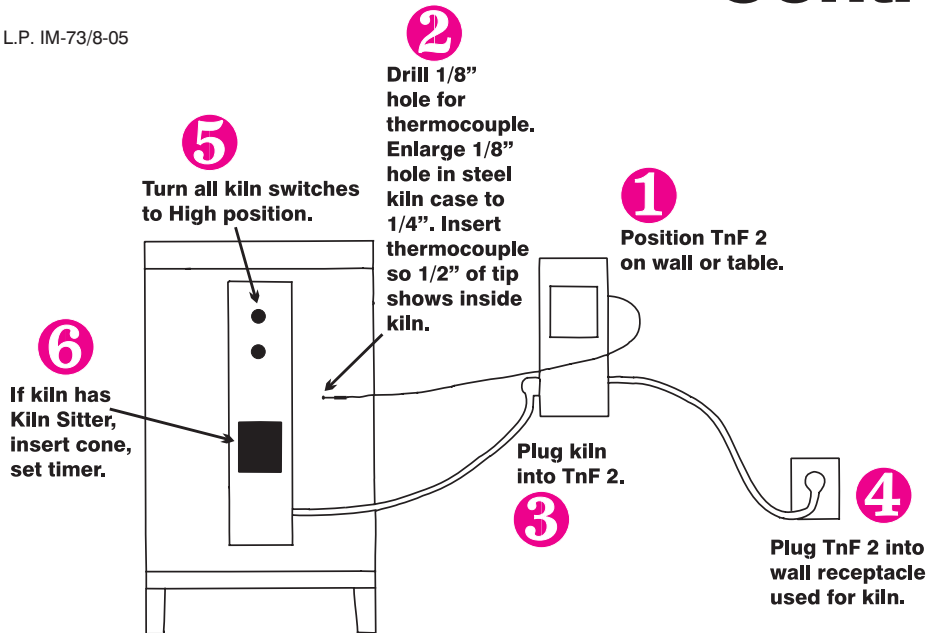


Paragon Industries, L. P.

2011 South Town East Blvd.
 Mesquite, Texas 75149-1122
 800-876-4328 / 972-288-7557
 Toll Free Fax: 888-222-6450
 Paragonind@att.net

Installing the TnF 2 Portable Controller

©2004, by Paragon Industries, L.P. IM-73/8-05



Important Guidelines

- 1** Do NOT cut or bend the thermocouple.
- 2** Keep thermocouple wires and the thick end of the thermocouple completely out of the firing chamber. Only the 1/8" diameter tube should be inserted into a firebrick hole.
- 3** Keep the thermocouple wires from touching the hot kiln case. The thermocouple itself must not touch anything metallic during operation.
- 4** Even though protected by insulation, thermocouple wires are sensitive to electromagnetic interference. Position the lead wires away from electrical appliances and wires such as the kiln cordset.
- 5** The thermocouple must protrude into the firing chamber at least 1/2" to 5/8" for accurate readings. (Over 1" is not recommended.) Keep the thermocouple at least 1/2" away from ware or furniture.
- 6** Position the thermocouple hole approximately midway between the firing chamber floor and roof.
- 7** Before using your TnF 2, please read the digital controller operating instructions.

Step 1: Position the TnF 2

Position the TnF 2 far enough away from your kiln to avoid heat damage. If your TnF 2 uses a mercury relay, the TnF 2 must be wall-mounted so that it is vertical. TnF 2s that have mechanical rather than mercury relays can hang vertically on a wall or lie flat on a table.

How to tell if your TnF 2 has a mercury relay: If the TnF 2 is placed horizontally on a table, the mercury relay will turn on power to the kiln, even when the controller is idle. When the TnF 2 is held upright, the power will shut back off.

Step 2: Attach the thermocouple to the kiln

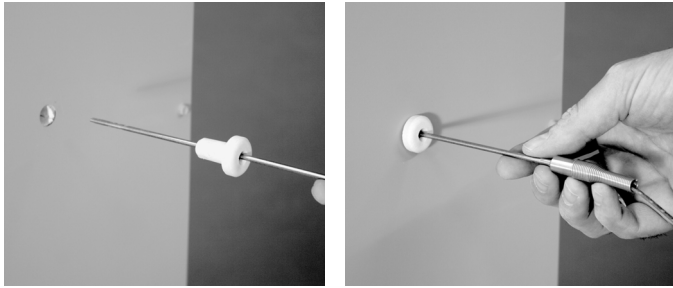
You can install the thermocouple (temperature sensor) through an existing 1/2" thermocouple hole, through a drilled peephole plug, or by drilling a new hole in the kiln.



Using a drilled peephole plug to attach the thermocouple to the kiln. Make sure the thermocouple does not fall out of the kiln.

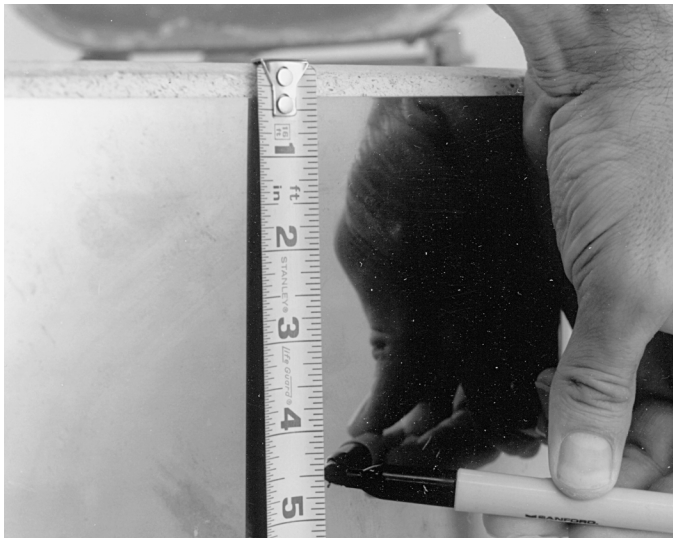
If you use an existing 1/2" hole, first insert the porcelain insulator on the thermocouple. Then insert the thermocouple into the hole. The thermocouple must protrude into the firing chamber at least 1/2" to 5/8".

IMPORTANT! If the thermocouple falls out of the kiln during firing or if the tip moves out of the firing chamber, the kiln will over-fire. Monitor the kiln during firing to make sure the thermocouple has not moved.



Drilling a 1/8" Thermocouple Hole

1 Drill a 1/8" hole in either a row of blank bricks or between two brick rows, approximately midway between floor and top. Avoid drilling closer than 1" to a heating element. Use a tape measure, if needed, and mark the location of the hole on the kiln case.



2 Wearing safety glasses, drill a 1/8" hole all the way through the kiln case and wall.

3 Enlarge the 1/8" hole in the kiln case to 1/4". Using a 1/4" drill bit, drill just deep enough to go through the case and no further. Enlarging the hole in the kiln case to 1/4" will prevent the thermocouple from touching the grounded steel case.

4 Press the thermocouple into the hole so that 1/2" to 5/8" or more of the tip protrudes into the firing chamber.



REMINDER: If the thermocouple is pulled out of the hole, the kiln will overfire.

5 Position the thermocouple lead wires so they are away from the hot sides of the kiln case, the cord set, or any other electrical appliances or wiring.

Step 3: Plug the kiln into the receptacle on the TnF 2.

Step 4: Plug the TnF 2 into the wall receptacle.

Plug your TnF 2 into the wall receptacle your kiln was using. Do NOT change the TnF 2 plug if it won't fit the wall receptacle.

Step 5: Turn the kiln switches to High.

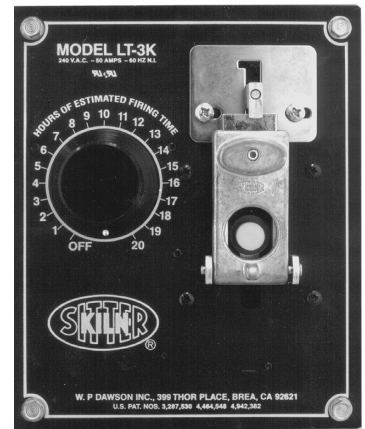
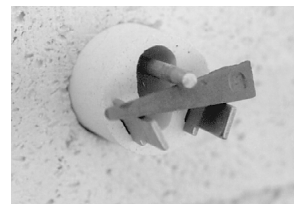
Turn all kiln switches to the On or High position. Leave all switches on full power when firing with the TnF 2.

If kiln does not have a Kiln Sitter, the installation is complete. Read the controller instruction manual before firing.

Step 6: Insert a cone in Kiln Sitter, set Limit Timer.

1 If your kiln has a Kiln Sitter® or Limit Timer, use it as a back up shut-off for the TnF 2. Place a cone in the Kiln Sitter rated one or two cones hotter than the firing. Set the Limit Timer for a few minutes longer than the expected firing time.

It will be necessary to use a new cone for every firing even if the previous cone did not bend.



WARNING: We cannot extend our warranty to cover any damage caused by overfiring, regardless of the circumstances. Even though your TnF 2 is an automatic controller, do not leave your kiln unattended while firing.

Wear firing safety glasses when looking into the peephole during firing.